Index of Authors

	PAGES
Abbondanza, A.	525–528
Abraham, E. P.	789–795
Adiga, P. R.	537–540
Alhadeff, J. A.	45–51
Allen, G.	545–563, 565–575, 577–589, 591–616
Ambrose-Griffin, M. C.	393–401
Andrews-Smith, G. L.	45–51
Anstee, D. J.	493–500
Appaji Rao, N.	249–252, 623–636
Arakawa, K.	647–653
Arndt, R.	403–412
Atassi, M. Z.	163–172, 661–666
Aziz, S.	265–267
Baden, D. G.	205–211
Balduini, C.	655–659
Baldwin, G. S.	789–795
Bardoni, A.	655–659
Bardsley, W. G.	739–765
Barrett, A. J.	695–701, 909–912
Barrett, C. H.	703–709
Batchelor, A. O.	893–903
Behar-Bannelier, M.	147–156
Benassayag, C.	851–856
Bird, K.	533–536
Booth, A. G.	31–44
Borchardt, R. T.	419–428
Bottomley, R. C.	577–589
Boveris, A.	131–140
Brady, F. O.	329–335
Brittain, T.	803–807
Buonocore, V.	637–645
Burditt, L. J.	541–543
Burgen, A. S. V.	501–506
Cadenas, E.	131–140
Cammack, R.	321–328
Chance, B.	131–140
Chang, W. T.	843–849
Chelton, E. T. J.	257–260
Chen, S. Y.	419–428
Chestukhina, G. G.	457–465
Chipko, B. R.	893–903
Chou, K.-C.	829–835
Citri, N.	529–532
Clarke, N. G.	253–255
Clemmensen, I.	173–180
Clore, G. M.	617–622
Coleman, R.	277–280
Compernolle, F.	857–862
Conley, T. G.	727–732, 733–738
Cooper, S. M.	289–295
Corbett, M. D.	205–211, 893–903
Coward, J. K.	419–428
Cox, R. A.	75–90
Danson, M. J.	393–401
Dawson, R. M. C.	253–255
d'Azzo, A.	541–543
Delorme, J.	851–856
De Matteis, F.	285–288
Desideri, A.	367–370
Dimitriadis, G. J.	467–477
Dodgson, K. S.	181–196, 703–709
Douglas, K. T.	843–849
Doumas, J.	851–856
Drummond, G. S.	157–162
Duggan, M.	257–260
Duine, J. A.	213–219, 221–226
Edwards, Y. H.	429–436
Engel, J.	775–780
Esnouf, M. P.	239–243
Feizi, T.	711–718
Finazzi-Agrò, A.	361–366
Findlay, J. B. C.	719–725
Finean, J. B.	277–280
Flanagan, P. R.	437–446
Forsén, S.	829–835
Forstner, G. G.	437–446
Foulds, L. R.	65–74
Franceschi, C.	525–528
Francis, D. M.	819–828
Frank, J., Jr.	213–219, 221–226
Freedman, R. B.	227–237
Friesen, H. G.	479–492
Furneaux, H. M.	91–103
Gagnon, J.	863–874
Gahl, W. A.	197–204
Galdes, A.	789–795
Galjaard, H.	541–543
Gatt, S.	115–121
Gibbs, A. H.	285–288
Gramenzi, F.	637–645
Grant, P. W.	447–456
Graziani, M. T.	361–366, 367–370
Greaves, M. W.	819–828
Green, N. M.	591–616
Griffin, W. G.	393–401
Grigor, M. R.	289–295
Gurecki, J. J.	269–272
Hale, G.	393–401, 905–908
Hall, D. O.	321–328
Halley, D. J. J.	541–543
Hamann, A.	403–412
Hardman, N.	105–113
Harness, J. R.	281–284
Head, J. F.	447–456
Heinegård, D.	687–694
Hendy, M. D.	65–74
Henry, L. E. A.	321–328
Hibasami, H.	419–428
Hill, B. C.	809–818
Hill, H. A. O.	789–795
Holst, J. J.	337–343
Höök, M.	521–524
Hopkinson, D. A.	429–436
Hounsell, E. F.	711–718
Houslay, M. D.	381–392
Huang, C.-H.	371–379
Huang, L. C.	371–379
Hughes, G. J.	515–519
Hunston, R. N.	257–260
Hunt, W. E.	533–536
Hunziker, P. E.	515–519
Idler, W. W.	913–916
Ikeda, M.	647–653
Imai, Y.	479–492
Irimura, T.	677–686
Jack, P. L.	105–113
Jaton, J.-C.	767–774, 775–780
Jauker, F.	141–146
Johansson, S.	521–524
Johnson, D. M. A.	863–874
Jones, A. S.	257–260
Katrukha, S. P.	457–465
Kavanagh, J.	739–765
Kazim, A. L.	163–172, 661–666
Kekwick, R. G. O.	667–676
Kelker, H. C.	157–162
Kenny, A. J.	31–44
Keokitichai, S.	837–841
Killilea, S. D.	303–309, 311–320
Klein, P.	403–412
Klemes, Y.	529–532
Knauer, G. R.	269–272
Knauer, T. E.	269–272
Knott-Hunziker, V.	797–802
Knowler, J. T.	265–267
Kostina, L. I.	457–465
Kotova, T. S.	457–465
Langhorne, J.	711–718
Lavrenova, G. I.	345–352
Lee, L. M. Y.	437–446
Leff, P.	739–765
Lehman, W.	447–456
Licastro, F.	525–528
Loyter, A.	115–121
Mallinson, P. D.	533–536
Marchmont, R. J.	381–392
Maske, R.	245–248
Mason, D. W.	1–20
Matsuo, M.	371–379
Matsuzaki, F.	479–492
Mauldin, D.	507–513
Maume, B. F.	851–856
Maume, G.	851–856

	PAGES
Mawby, W. J.	493–500
McIntosh, P. R.	227–237
Michell, R. H.	277–280
Milborrow, B. V.	261–264
Milner-White, E. J.	297–302
Mohan, S. B.	667–676
Mondovi, B.	361–366
Morpurgo, L.	361–366, 367–370
Muniyappa, K.	537–540
Murphy, R. F.	303–309, 311–320
Murray, R. K.	147–156
Naudé, R. J.	245–248
Nicholls, P.	809–818
Nunez, E. A.	851–856
O'Brien, M. M.	21–30
O'Carra, P.	303–309, 311–320
Oelofsen, W.	245–248
Offord, R. E.	239–243
O'Leary, M. K.	257–260
Olsom, D. R.	281–284
O'Neill, M. A.	53–63
Orlek, B. S.	797–802
Osawa, T.	677–686
Overton, D. J.	257–260
Pace, W.	637–645
Palmer, J. M.	321–328
Payne, W. J.	703–709
Pearson, C. K.	91–103
Pegg, A. E.	419–428
Penny, D.	65–74
Perham, R. N.	393–401, 905–908
Petrucci, T.	637–645
Pitot, H. C.	197–204
Poerio, E.	637–645
Poirier, M. C.	281–284
Potter, J.	429–436
Powell, J. T.	123–129
Priddle, J. D.	239–243
Priest, D. G.	727–732, 733–738
Ramesh, K. S.	249–252, 623–636
Record, M.	115–121
Reid, K. B. M.	863–874
Roberts, G. C. K.	501–506
Robinson, D.	541–543
Rose, K.	239–243
Rotilio, G.	361–366, 367–370
Roufogalis, B. D.	507–513
Rowlatt, C.	353–360
Salvatore, A. K.	437–446
Salvesen, G. S.	695–701
Sammes, P. G.	797–802
Sandbjerg Hansen, M.	173–180
Sasaki, N.	479–492
Savu, L.	851–856
Sawyer, L.	884–886
Schofield, P. J.	21–30
Schwalbe, C. H.	533–536
Schwitzguebel, J.-P.	321–328
Scott, J. E.	887–891
Selvendran, R. R.	53–63
Serafini-Cessi, F.	525–528
Shaw, D. J.	181–196
Shukla, S. D.	277–280
Silano, V.	637–645
Smith, G. J.	353–360
Speziale, P.	655–659
Steinert, P. M.	281–284, 913–916
Stepanov, V. M.	345–352, 457–465
Swift, I. E.	261–264
Tanner, M. J. A.	493–500
Tarasova, N. I.	345–352
Tata, J. R.	467–477
Thatcher, D. R.	875–883, 884–886
Thiele, H.-G.	403–412
Thompson, M. F.	819–828
Thompson, R. D.	75–90
Thomson, J. W.	501–506
Tokutake, S.	413–417
Trinnaman, B. J.	577–589, 591–616
Tschopp, J.	767–774, 775–780
Tsuji, T.	677–686
Tsushima, T.	479–492
Udom, A. O.	329–335
Vale, A. M.	197–204
Vallette, G.	851–856
Vasan, N.	781–787
Waight, R. D.	739–765
Waley, S. G.	789–795, 797–802
Walker, R. T.	257–260
Wantz, M. L.	913–916
Weber, W. W.	157–162
Wells, E.	719–725
White, G. F.	181–196, 703–709
Wieslander, J.	687–694
Williams, A. F.	1–20
Wilson, K. J.	515–519
Winchester, B. G.	541–543
Wood, E.	711–718
Wrigglesworth, J. M.	837–841
Wright, J. K.	767–774, 775–780
Yoch, D. C.	273–276
Yuki, M.	647–653
Yuspa, S. H.	281–284
Zalunin, I. A.	457–465

Index of Subjects

N-Acetylation
  drugs, *see* Drug *N*-acetylation
Acetylator polymorphism
  acetylator polymorphism 157–162
Acetylcholinesterase
  deviation from Michaelis–Menten kinetics 739–765
Acetyl-coenzyme A carboxylase
  avocado plastids 667–676
  spinach chloroplasts 667–676
N-Acetyltransferase
  rabbit peripheral-blood *N*-acetyltransferase 157–162
  rabbit peripheral blood 157–162
Acid phosphatase
  deviation from Michaelis–Menten kinetics 739–765
1-*O*-Acyl-β-D-glucopyranuronic acids
  bilirubin and biliverdin 857–862
Acylglycerols
  esterification of positions-1 and -2 289–295
Acyltransferases
  lactating rat mammary gland 289–295
  microsomal 289–295
Adenosine 3′:5′-cyclic monophosphate-dependent protein kinase
  glutamate residues at arginine-recognition site 371–379
  rat skeletal muscle 371–379
Adenosine deaminase
  deviation from Michaelis–Menten kinetics 739–765
Adenosine diphosphate ribose transferase
  baby-hamster kidney cells (BHK-21/C13) 91–103
  chromatin from BHK-21/C13 cells 91–103
Adenosine triphosphatase
  Ca^{2+}-transporting, see Calcium ion-transporting adenosine triphosphatase
  Mg^{2+}-dependent, Ca^{2+}-stimulated, *see* Mg^{2+}-dependent, Ca^{2+}-stimulated adenosine triphosphatase
ADP-ribose transferase, *see* Adenosine diphosphate ribose transferase
Aequipecten irradians, *see* Bay scallop
Affinity chromatography
  Blue Sepharose, *see* Blue Sepharose affinity chromatography
  riboflavin-binding protein 537–540
Affinity labelling
  β-lactamase I 797–802
Agarose–lumiflavin, *see* Lumiflavin–agarose
Alcohol dehydrogenase
  Comamonas terrigena 703–709
  specificity towards secondary alcohols 703–709
  zinc-thionein 329–335
Alcohol dehydrogenase alleloenzymes (Adh^{N-11}, Adh^{S} and Adh^{UF})
  complete amino acid sequence 875–886
  fruitfly 875–886
Alcohols
  secondary, *see* Secondary alcohols
Aldehyde reductases
  human brain 21–30
Aldolase
  zinc-thionein 329–335
Algae, marine subtropical green, *see* Marine subtropical green algae
Algal biliproteins
  phycobilin chromophores 303–309, 311–320
Alkaline phosphatase
  release by phospholipase C 277–280
  zinc-thionein 329–335
Alkaline phosphodiesterase I
  failure of phospholipase C to release 277–280
Alkyl sulphate esters
  preparation and characterization 181–196
Alkylsulphatase
  Pseudomonas C12B 181–196
Alkylsulphohydrolase
  inducible S3 secondary 181–196
  Pseudomonas C12B 181–196
Alleloenzymes
  alcohol dehydrogenase, *see* Alcohol dehydrogenase alleloenzymes
Allosterism
  serine hydroxymethyltransferase 623–636
Amino acid sequences
  haemoglobin α-chain 65–74
  pyruvate dehydrogenase multienzyme complex 905–908
  three alcohol dehydrogenase isoenzymes 875–886
Amino acids
  evolutionary substitution neighbouring antigenic sites 163–172
  pool saturation 141–146
ε-Aminohexanoylfucosamine–agarose
  α-L-fucosidase purification 45–51
Aminopropyltransferases
  inhibition 419–428
α-Amylase
  interaction with wheat protein inhibitors 637–645
  yellow mealworm 637–645
Analogues
  substrate, *see* Substrate analogues
Angiotensin
  chemical identity with tryptensin 647–653
Antibodies
  anti-(human Tamm–Horsfall glycoprotein) 525–528
  kinetics of binding to membrane antigens 1–20
  monoclonal 1–20
Antibody-combining sites
  synthetic mimicry 661–666
Antifolate drugs
  crystallographic studies on geometry 533–536
  molecular-orbital studies on geometry 533–536
Antifolates
  serine hydroxymethyltransferase 623–636
Antigenic sites
  lysozyme, *see* Lysozyme antigenic sites
Antigens
  blood-group-H, *see* Blood-group-H antigens
  blood-group-i, *see* Blood-group-i antigens

Antigens—*cont.*
blood-group-I, *see* Blood-group-I antigens
membrane 1–20
thymus–brain 403–412
Thy-1, *see* Thy-1 antigen
Apoenzymes
zinc-requiring, *see* Zinc-requiring apoenzymes
Arginine 4-methyl-7-coumarylamide
fluorimetric assay of cathepsin H 909–912
Arginine-recognition site
cyclic AMP-dependent protein kinase 371–379
Arylamines
N-oxidation 893–903
Arylhydroxylamine
nitroso group 893–903
Arylsulphatase
deviation from Michaelis–Menten kinetics 739–765
ATPase, *see* Adenosine triphosphatase
Avocado (*Persea americana*)
plastid acetyl-coenzyme A carboxylase 667–676
1-Azido-4-[^{125}I]iodobenzene
labelling of human erythrocyte band-3 polypeptide 719–725

Baby-hamster kidney cells (BHK-21/C13)
ADP-ribose transferase 91–103
Bacillus thuringiensis
crystal-forming proteins 457–465
Background-noise analysis
evaluation of initial kinetic rates 141–146
Bacteria
detergent-degrading, *see* Detergent-degrading bacteria
surfactant-degrading, *see* Surfactant-degrading bacteria
Bacteriophage λ
cloning of South-African-clawed-toad (*Xenopus laevis*) conserved rRNA sequences 75–90
Bacterioruberin
Halobacterium halobium 261–264
retention of mevalonate 4-*pro-R* hydrogen atom at C-2,2′ position 261–264
Baker's yeast (*Saccharomyces cerevisiae*)
carboxypeptidase Y 843–849
Band-3 glycoprotein (polypeptide), *see* Human erythrocyte-membrane band-3 glycoprotein
Bay scallop (*Aequipecten irradians*)
troponin I- and C-like proteins 447–456
Bean, runner, *see* Runner bean (*Phaseolus coccineus*)
Benzylamine oxidase
deviation from Michaelis–Menten kinetics 739–765
Benzyloxycarbonylphenylalanylarginine 4-methyl-7-coumarylamide
fluorimetric assay of cathepsin B 909–912
BHK cells, *see* Baby-hamster kidney cells
Biliproteins
algal, *see* Algal biliproteins
Bilirubin 1-*O*-acyl-β-D-glucopyranuronic acid
synthesis 857–862
Biliverdin 1-*O*-acyl-β-D-glucopyranuronic acid
synthesis 857–862
Binding
antigen–antibody 1–20
dihydrofolate reductase 501–506
fibronectin to collagen 521–524
kinetics 1–20
substrate analogues to uricase 727–732
Blood
N-acetyltransferase 157–162
Blood-group-H antigens
human erythrocyte-membrane band-3 glycoprotein 677–686
Blood-group-i antigens
sheep gastric mucins 711–718
Blood-group-I antigens
human erythrocyte-membrane band-3 glycoprotein 677–686
sheep gastric mucins 711–718
Blue-copper proteins
Japanese-lacquer-tree-laccase 361–366, 367–370
Blue Sepharose affinity chromatography
serine hydroxymethyltransferase 623–636
BNPS-skatole, *see* 3-Bromo-3-methyl-2-[(2-nitrophenyl)-thio]-3*H*-indole
Bombyx mori, *see* Silkworm
Bovine cornea proteoglycans
interaction with collagen 655–659
Bovine prothrombin
N-terminal region 239–243
Brain
glycerol *vic*-cyclic phosphate 253–255
polyol-pathway enzymes 21–30
thymus–brain antigen 403–412
α-Bromo-4-amino-3-nitroacetophenone
new protein-modification reagent 345–352
3-Bromo-3-methyl-2-[(2-nitrophenyl)thio]-3*H*-indole ('BPNS-skatole')
solid-phase peptide microsequencing 515–519
6β-Bromopenicillanic acid
inactivation of β-lactamase I 797–802
Bromoperoxidases
marine subtropical green algae 205–211
N-Bromosuccinimide
ligand binding to dihydrofolate reductase 501–506
solid-phase peptide microsequencing 515–519

Ca^{2+}-binding proteins
human erythrocyte membrane 507–513
Calcium ion-transporting adenosine triphosphatase
α-chymotryptic digest 565–575
CNBr peptides 591–616
human erythrocyte membrane 507–513
peptic peptides 577–589
primary structure 545–563, 565–575, 577–589, 591–616
rabbit skeletal sarcoplasmic reticulum 545–563, 565–575, 577–589, 591–616
sequence of extramembranous segments 577–589
soluble tryptic peptides 545–563
staphylococcal-proteinase peptides 577–589
succinylated carboxymethylated 545–563
thermolytic peptides 577–589
tryptic peptides 545–563, 577–589
Calcium ions
binding of troponins 447–456
Calmodulin
protein activator of ATPase 507–513
Carbohydrate moiety
human erythrocyte-membrane band-3 glycoprotein 677–686

Carbonic anhydrase
zinc-thionein 329–335
γ-Carboxyglutamic acid/glutamic acid ratio
mass-spectrometric method of estimation 239–243
Carboxypeptidase Y
baker's yeast 843–849
ionizing groups 843–849
mechanistic studies 843–849
Carotenoids
Halobacterium halobuim 261–264
Cartilage proteoglycans
immunochemical analysis 687–694
osteoarthritis 781–787
Cathepsin B
fluorimetric assay 909–912
Cathepsin H
fluorimetric assay 909–912
Cell surface
kinetics of antibody–antigen binding 1–20
Cell wall
runner bean (*Phaseolus coccineus*) glycoproteins 53–63
Cells
baby-hamster kidney (BHK-21/C13), *see* Baby-hamster kidney cells (BHK-21/C13)
Chelators
zinc 329–335
Chemiluminescence (low level)
hydroperoxide-supplemented cytochrome *c* 131–140
Chloride peroxidase
action on 4-chloroaniline 893–903
model for marine-subtropical-green-algal bromoperoxidases 205–211
4-Chloroaniline
action of chloride peroxidase 893–903
Chloroperoxidase, *see* Chloride peroxidase
Chloroplasts
acetyl-coenzyme A carboxylase 667–676
Chondroitin sulphate
cartilage proteoglycans 687–694
Chromatin
ADP-ribose transferase 91–103
BHK-21/C13 cells 91–103
digestion by micrococcal nuclease 353–360
submandibular salivary gland 353–360
template-active and -inactive 467–477
Chromophores
phycobilin, *see* Phycobilin chromophores
Chymotrypsin
deviation from Michaelis–Menten kinetics 739–765
Cibacron Blue 3G-A
inhibition of monkey liver serine hydroxymethyltransferase 249–252
Cobalt(II)-β-lactamase II
^{1}H n.m.r. 789–795
Collagen
binding to fibronectin 521–524
interaction with proteoglycans 655–659, 887–891
Comamonas terrigena
alcohol dehydrogenase 703–709
Complement
factor D 863–874
Complement binding studies
immunoglobulin G 767–774, 775–780
Complement component C1
binding to immunoglobulin G 775–780
Complement subcomponent C1q
binding to immunoglobulin G 775–780
Component C1, *see* Complement component C1
Computers
deviations from Michaelis–Menten kinetics 739–765
Concanavalin A–Sepharose
α-L-fucosidase purification 45–51
Copper, blue, *see* Blue-copper proteins
Copper pairs
Japanese-lacquer-tree laccase 361–366, 367–370
Copper redox potentials
Japanese-lacquer-tree laccase 367–370
Copper(II), Type 2, *see* Type 2 copper(II)
Cornea
bovine, *see* Bovine cornea
Covalent binding
proteinase reaction with α_2-macroglobulin 695–701
Cross-linking
rabbit immunoglobulin G 767–774
Cryptomonads
phycocyanin 303–309
Cryptoviolin
algal 303–309
Crystal-forming proteins
Bacillus thuringiensis 457–465
Crystallographic studies
antifolate drugs 533–536
Cupric ion oxidation
adult-human haemoglobin 803–807
Cupric phenanthroline
cross-linking 227–237
Cyanide
uricase inhibition 733–738
Cyclic AMP, *see* Adenosine 3′:5′-cyclic monophosphate
Cyclic AMP phosphodiesterase
rat liver-plasma membrane 381–392
Cytochrome aa_3–cytochrome *c* complex, *see* Cytochrome *c*–cytochrome aa_3 complex
Cytochrome *c*
low-level chemiluminescence 131–140
Cytochrome *c*–cytochrome aa_3 complex
reduction and activity of cytochrome *c* 803–807
Cytochrome *c* oxidase
cytochrome *c*–cytochrome aa_3 complex 809–818
Cytochrome oxidase
intermediates in reaction with O_2 at low temperatures 617–622
membrane-bound mixed-valence-state 617–622
Cytochrome *P*-450
copper-dependent cross-linking reactions between two forms 227–237
rabbit liver microsomal membranes 227–237

Deoxyribonuclease I
gene digestion 467–477
Deoxyribonucleic acid
foldback, *see* Foldback deoxyribonucleic acid
nuclear, *see* Nuclear deoxyribonucleic acid
Detergent-degrading bacteria
Pseudomonas alkylsulphohydrolase 181–196

Detergent (Triton X-100)
maltase/glucoamylase solubilization 437–446
Diamine oxidase
foetal bovine serum 197–204
Diaminodurene
cytochrome *c* reduction 809–818
Diaphorase-4, *see* FAD-dependent NAD(P)H diaphorase
Dicoumarol
diaphorase inhibition 429–436
Dihydrofolate reductase
binding of ligands 501–506
modification by *N*-bromosuccinimide 501–506
Dihydroxyacetone phosphate
acylation in mammary gland 289–295
3,5-Di[^{125}I]iodo-4-azidobenzenesulphonate photolysis 31–44
4-*NN*-Dimethylaminoazobenzene 4′-isothiocyanate ('DABITC')
peptide sequencing 515–519
4-*NN*-Dimethylaminoazobenzene 4′-thiohydantoin ('DABTH')
peptide sequencing 515–519
Dinucleotide-binding fold
serine hydroxymethyltransferase 249–252
Dithiobis (succinimidylpropionate)
cross-linking of immunoglobulin G 767–774
Drosophila melanogaster, *see* Fruitfly
Drug *N*-acetylation
rabbit peripheral-blood *N*-acetyltransferase 157–162
Drugs
antifolate, *see* Antifolate drugs
liver haem conversion into modified porphyrins 285–288

Electron microscopy
localization of tendon proteoglycans 887–891
Electron transfer
cytochrome *c*–cytochrome aa_3 complex 809–818
Electrophoresis
polypeptide phosphorylation 147–156
β-Endorphin
opiate activity 245–248
ostrich (*Struthio camelus*) pituitary gland 245–248
Endotoxins
Bacillus thuringiensis 457–465
Enzyme-catalysed rate laws
graphical rules 829–835
Enzymes
allelo-, *see* Alleloenzymes
chemical modification 371–379
copper 367–370
glyco-, *see* Glycoenzymes
halogenating, *see* Halogenating enzymes
iso-, *see* Isoenzymes
membranous, *see* Membranous enzymes
plasma-membrane, *see* Plasma-membrane enzymes
polyol pathway, *see* Polyol-pathway enzymes
zinc-requiring apo-, *see* Zinc-requiring apoenzymes
Epidermis
bovine snout 913–916
keratin proteins 281–284
unique keratin-filament subunits 913–916
Erythrocyte
human, *see* Human erythrocyte
Erythrocyte 'ghosts'
chicken sphingomyelinase 115–121
sphingomyelin hydrolysis 115–121
Erythrocyte membrane
glyceraldehyde 3-phosphate dehydrogenase 837–841
human band-3 glycoprotein (polypeptide) 677–686, 719–725
protein activator of Mg^{2+}/Ca^{2+}-ATPase 507–513
Escherichia coli
pyruvate dehydrogenase mutlienzyme complex 393–401, 905–908
Ester glycosides
synthesis 857–862
α-Ethoxyethyl group
participation at C-1 carbonium ion site 857–862
protecting group for carbohydrates 857–862
Evolution
amino acid substitution 163–172
ribosomal ribonucleic acid 75–90

Factor D
active-site serine residue 863–874
alternative pathway of human complement 863–874
major CNBr fragments 863–874
FAD-dependent NAD(P)H diaphorase
inhibition by dicoumarol 429–436
menadione reductase activity 429–436
Fatty acid biosynthesis
plant plastid acetyl-coenzyme A carboxylase 667–676
Fatty acids
non-esterified, *see* Non-esterified fatty acids
specificity of microsomal acyltransferase 289–295
Ferrocyanide
titration with Japanese-lacquer-tree laccase 367–370
Fibrinolysis
plasmin inhibitor 173–180
Fibroblast cultures
α-mannosidases 541–543
Fibroin
silk protein 413–417
Fibronectin
binding to collagen 521–524
Fluorimetric assays
cathepsins B and H 909–912
methylcoumarylamide substrates 909–912
Foetal bovine serum
putrescine oxidase and spermine oxidase 197–204
α-Foetoprotein
interaction with oestrogen 851–856
Foldback deoxyribonucleic acid
physical properties 105–113
Fruitfly (*Drosophila melanogaster*)
alcohol dehydrogenase 875–886
ribosomal ribonucleic acid homologies 75–90
α-L-Fucosidase
fucosidosis-patient liver 45–51
Fucosidosis
liver α-L-fucosidase 45–51
Fumarase
deviation from Michaelis–Menten kinetics 739–765

Galactose dehydrogenase
deviations from Michaelis–Menten kinetics 739–765

β-Galactosidase
deviations from Michaelis–Menten kinetics 739–765
β-Galactoside-binding proteins
rat and human lung 123–129
Gastric mucins
blood-group-I and -i antigens 711–718
Genes
partition of expressed and non-expressed 467–477
ribonucleic acid (25–28 S) 75–90
Glicentin
entire sequence of glucagon 337–343
Glucagon
entire sequence contained by glicentin 337–343
Glucoamylase/maltase, *see* Maltase/glucoamylase
Glutamate residues
arginine-recognition site of cyclic AMP-dependent protein kinase 371–379
Glutamic acid/γ-carboxyglutamic acid ratio
mass-spectrometric method of estimation 239–243
Glutamine synthetase
regulation of *Rhodopseudomonas capsulata* nitrogenase A and R concentrations 273–276
Glyceraldehyde 3-phosphate dehydrogenase
intact-human-erythrocyte membrane 837–841
Glycerol *vic*-cyclic phosphate
rat tissues (brain, kidney and liver) 253–255
Glycerol phosphate
acylation in mammary gland 289–295
Glycoenzymes
maltase/glucoamylase 437–446
Glycogen metabolism
hormonal control 371–379
Glycopeptides
human Tamm–Horsfall glycoprotein 525–528
Glycoproteins
band-3, *see* Band-3 glycoprotein
hydroxyproline-rich, *see* Hydroxyproline-rich glycoproteins
runner-bean (*Phaseolus coccineus*) cell wall 53–63
Tamm–Horsfall, *see* Tamm–Horsfall glycoprotein
thymus–brain antigen 403–412
see also Proteoglycans
Graph theory
enzyme-catalysed rate laws 829–835
Griseofulvin
accumulation of protohaem ferro-lyase inhibitor 285–288
Growth-hormone receptor, *see* Somatotropin receptor

^{1}H nuclear-magnetic-resonance spectroscopy
cobalt (II)-β-lactamase 789–795
Haem
conversion into modified porphyrins 285–288
Haematenic acid
peptide derivatives 311–320
Haemoglobin
adult-human 803–807
cupric ion oxidation 803–807
Haemoglobin sequences
verification of minimal phylogenetic trees 65–74
Halobacterium halobium
bacterioruberin 261–264
Halogenating enzymes
marine 205–211
Halogenation, ring, *see* Ring halogenation
Heparin
binding of fibronectin to collagen 521–524
Hepatocytes
release of plasma-membrane enzymes by phospholipase C 277–280
Heterogeneous nuclear ribonucleic acid
detection of mRNA sequences 265–267
oestrogen-stimulated rat uterus 265–267
Histamine methyltransferase
human skin 819–828
kinetics 819–828
reaction mechanism 819–828
Human erythrocyte-membrane band-3 glycoprotein
carbohydrate moiety 677–686
photosensitive hydrophobic probe (1-azido-4-[^{125}I]iodobenzene) 719–725
Human erythrocyte variant Ph
abnormal membrane sialoglycoprotein 493–500
Human-somatotropin-binding protein
pregnant-rabbit liver 479–492
Hyaluronic acid-binding region
cartilage proteoglycans 687–694
Hydroperoxides
cytochrome *c* 131–140
Hydroxyproline-rich glycoproteins
runner-bean (*Phaseolus coccineus*) cell wall 53–63
Hyphomicrobium X
oxidized form of methanol dehydrogenase 213–219, 221–226

Immunoelectrophoresis
labelled membrane proteins 31–44
Immunoglobulin G
chemically defined oligomers 767–774
complement binding studies 767–774, 775–780
di-, tri- and tetra-meric complexes 775–780
Inhibitors
plasma proteinase, *see* Plasma proteinase inhibitors
plasmin, *see* Plasmin inhibitor
Intestine
maltase/glucoamylase 437–446
Ionizing groups
carboxypeptidase Y 843–849
Isoenzymes
diaphorases 429–436

Japanese lacquer tree (*Rhus vernicifera*)
Type-2-copper(II)-depleted laccase 361–366, 367–370

Keratan sulphate
cartilage proteoglycans 687–694
Keratin-filament subunits
bovine snout epidermis 913–916
Keratin proteins
specific quantification by radioimmunoassay 281–284
Kidney
glycerol *vic*-cyclic phosphate 253–255
microvillar-membrane proteins 31–44
peptidases 31–44

Kinetics
antibody binding to membrane antigens 1–20
background-noise analysis 141–146
evaluation of initial rates 141–146
graph theory 829–835
histamine methyltransferase 819–828
Michaelis–Menten, *see* Michaelis–Menten kinetics
inactivation of β-lactamase I 797–802

Laccase
interrelation of copper sites 367–370
Japanese lacquer tree 361–366, 367–370
Type-2-copper(II)-depleted 361–366, 367–370
Type 2 copper(II) in 330nm chromophore 361–366
β-Lactamase, *see* Penicillinase
β-Lactamase I
kinetics of inactivation by 6β-bromopenicillanic acid 797–802
β-Lactamase II, cobalt (II)-, *see* Cobalt(II)-β-lactamase II
Lactate dehydrogenase
deviations from Michaelis–Menten kinetics 739–765
Lectins
human Tamm–Horsfall glycoprotein 525–528
lung, *see* Lung lectin
Leucoagglutinin
Tamm–Horsfall glycoprotein 525–528
Ligands
binding to dihydrofolate reductase 501–506
Link protein
cartilage proteoglycans 687–694
Lipoic acid residues
Escherichia coli pyruvate dehydrogenase multienzyme complex 393–401, 905–908
Liposomes
sphingomyelin hydrolysis 115–121
Liver
cyclic AMP phosphodiesterase 381–392
cytochrome *P*-450 227–237
α-L-fucosidase 45–51
glycerol *vic*-cyclic phosphate 253–255
haem conversion to modified porphyrins 285–288
microsomal-membrane-polypeptide phosphorylation 147–156
serine hydroxymethyltransferase 623–636
zinc-thionein 329–335
Lumiflavin–agarose
riboflavin-binding protein 537–540
Lung
β-galactoside-binding proteins 123–129
Lung lectin
purification and properties 123–129
Lymphocyte transformation
Tamm–Horsfall glycoprotein 525–528
Lysozyme antigenic sites
distance calculation of neighbouring residues 163–172

α_2-Macroglobulin
covalent binding of proteinases 695–701
Maltase/glucoamylase
detergent- and papain-solubilized 437–446
rat intestine 437–446
Mammary gland
microsomal acyltransferase 289–295
α-Mannosidases
fibroblast cultures 541–543
mannosidosis and mucolipidosis II 541–543
Mannosidosis
α-mannosidases in fibroblasts 541–543
Marine subtropical green algae (*Penicillus capitatus*, *Penicillus lamourouxii* and *Rhipocephalus phoenix*)
bromo- and chloro-peroxidases
Mass-spectrometric methods
γ-carboxyglutamic acid/glutamic acid ratio at specific sites in proteins 239–243
Mealworm, yellow, *see* Yellow mealworm
Membrane sialoglycoprotein
abnormal 493–500
human erythrocyte variant Ph 493–500
Membranes
antigens 1–20
asymmetric labelling by radioiodination 31–44
cytochrome oxidase 617–622
erythrocyte, *see* Erythrocyte membrane
microsomal, *see* Microsomal membranes
microvillar, *see* Microvillar membrane
photolabelling 31–44
plant plastid acetyl-coenzyme A carboxylase 667–676
plasma, *see* Plasma membrane
protein diffusion and cross-linking 227–237
topology 31–44
transport of an anionic photolabelling reagent 31–44
Membranous enzymes
utilization of membranous lipid substrates 115–121
Menadione reductase
diaphorase 429–436
Messenger ribonucleic acid
sequences in heterogeneous nuclear RNA fractions 265–267
1-*O*-Mesylate, *see* 1-*O*-methanesulphonate
Metalloproteins
superoxide dismutase 321–325
Metallothionein
zinc-thionein 329–335
1-*O*-Methanesulphonate (mesylate) group
displacement in α-ethoxyethyl-protected glucuronic acid 857–862
Methanol dehydrogenase
oxidized form from *Hyphomicrobium* X 213–219, 221–226
quinone prosthetic group 221–226
Methylcoumarylamide substrates
cathepsins B and H 909–912
5′-Methylthioadenosine
effect on polyamine synthases 419–428
Mevalonate
retention of 4-*pro*-*R* H atom at C-2,2′ of bacterioruberin 261–264
Mg^{2+}-dependent, Ca^{2+}-stimulated adenosine triphosphatase
erythrocyte membrane 507–513
protein activator distinct from calmodulin 507–513
Michaelis–Menten kinetics
deviations 739–765

Micrococcal nuclease
digestion of mouse submandibular-salivary-gland chromatin 353–360
subnuclear fractionation 467–477
Microsomal fraction
acyltransferases 289–295
Microsomal membranes
cytochrome *P*-450 227–237
polypeptide phosphorylation 147–156
Microsomal mono-oxygenases
molecular organization 227–237
Microsomes, *see* Microsomal fraction
Microvillar membrane
proteins 31–44
Minimal phylogenetic trees
techniques for verification illustrated with haemoglobin sequences 65–74
Mitochondria
bovine heart cytochrome oxidase 617–622
superoxide dismutase 321–325
Mixed valence state
cytochrome oxidase 617–622
Molecular-orbital studies
antifolate drugs 533–536
Molluscan troponins
stoichiometry and location in myofibril 447–456
Mucins
gastric, *see* Gastric mucins
Mucolipidosis II
α-mannosidases in fibroblasts 541–543
Multienzyme complexes
pyruvate dehydrogenase, *see* Pyruvate dehydrogenase multienzyme complex
Muscle
skeletal, *see* Skeletal muscle
Myeloma protein M-603
phosphocholine-combining site 661–666
Myofibrils
troponin I- and C-like proteins 447–456

NADP(H), *see* Nicotinamide–adenine dinucleotide phosphate (reduced)
NAD(P)H diaphorase
FAD-dependent, *see* FAD-dependent NAD(P)H diaphorase
Nearest-neighbour analysis
protein binding site 163–172
superoxide dismutase 321–325
Neurospora crassa
25–28S-ribonucleic acid genes 75–90
Nicotinamide–adenine dinucleotide phosphate (reduced)
binding to dihydrofolate reductase 501–506
Nitrogenases A and R
Rhodopseudomonas capsulata 273–276
Non-esterified fatty acids
serum competitor of oestrogen–α_1-foetoprotein interactions 851–856
Nuclear deoxyribonucleic acid
sequence organization in slime mould 105–113
slime mould (*Physarum polycephalum*) 105–113
Nuclear-magnetic-resonance spectroscopy
^{1}H, *see* ^{1}H nuclear-magnetic-resonance spectroscopy
Nucleases
micrococcal, *see* Micrococcal nuclease
probes 467–477
Nuclei
different transcriptional activities 467–477
5′-Nucleotidase
release by phospholipase C 277–280

Oestrogen
interaction with rat α_1-foetoprotein 851–856
stimulation of rat uterus 265–267
Oligomerization
rabbit immunoglobulin G 767–774, 775–780
Opiate activity
β-endorphin from ostrich pituitary gland 245–248
Osteoarthritis
human cartilage proteoglycans 781–787
Ostrich (*Struthio camelus*)
pituitary-gland β-endorphin 245–248
Oxidation
adult-human haemoglobin 803–807
N-Oxidation
4-chloroaniline 893–903
Oxygen, singlet, *see* Singlet oxygen

Palmitoyl-coenzyme A hydrolase
rat submaxillary gland 269–272
substrate stabilization of activity 269–272
Papain
maltase/glucoamylase solubilization 437–446
Penicillinase
conformative response 529–532
cross-linking 529–532
substrate-induced derivatives 529–532
see also β-Lactamase
Penicillus capitatus, *see* Marine subtropical green algae
Penicillus lamourouxii, *see* Marine subtropical green algae
Pepsin
modification of methionine-290 residue 345–352
Peptidases
kidney 31–44
Peptides
fragmentation 515–519
glyco-, *see* Glycopeptides
Peroxidase
deviations from Michaelis–Menten kinetics 739–765
Persea americana, *see* Avocado
Ph, *see* Human erythrocyte variant Ph
Phaseolus coccineus, *see* Runner bean
Phosphatase, acid, *see* Acid phosphatase
Phosphatase, alkaline, *see* Alkaline phosphatase
Phosphatidylinositol-specific phospholipase C
selective release of plasma-membrane enzymes 277–280
Phosphocholine-combining site
myeloma protein M-603 661–666
surface-simulation synthesis 661–666
Phospholipase C, phosphatidylinositol-specific, *see* Phosphatidylinositol-specific phospholipase C
Phosphorylation
liver microsomal-membrane polypeptides 147–156
proteins 371–379

Photolysis
3,5-di[^{125}I]iodo-4-azidobenzenesulphonate 31–44
Photosensitive hydrophobic probe (1-azido-4-[^{125}I]iodobenzene)
labelling of human erythrocyte band-3 polypeptide 719–725
Phycobilin chromophores
algal biliproteins 303–309, 311–320
Phycocyanin
R-, C- and cryptomonad 303–309, 311–320
Phycocyanobilin
algal 303–309
apoprotein linkages 311–320
Phycoerythrin
R-, B- and C- 303–309, 311–320
Phycoerythrobilin
algal 303–309
apoprotein linkages 311–320
Phycourobilin
algal 303–309
Phylogenetic trees, minimal, *see* Minimal phylogenetic trees
Physarum polycephalum, *see* Slime mould
Phytohaemagglutinin
Tamm–Horsfall glycoprotein 525–528
Pituitary gland
β-endorphin opiate activity 245–248
Plasma membrane
cyclic AMP phosphodiesterase 381–392
maltase/glucoamylase 437–446
Plasma-membrane enzymes
rat hepatocytes 277–280
selective release by phosphatidylinositol-specific phospholipase C 277–280
Plasma proteinase inhibitors
non-identity with a new fast-acting plasmin inhibitor 173–180
Plasmin inhibitor
human platelets 173–180
non-identity with known plasma proteinase inhibitors 173–180
Plastids
acetyl-coenzyme A carboxylase 667–676
Platelets
new fast-acting plasmin inhibitor 173–180
Polyamines
foetal bovine serum 197–204
inhibition of synthesis 419–428
Polyol-pathway enzymes
human brain 21–30
Polypeptides
band-3, *see* Human erythrocyte-membrane band-3 polypeptide
liver microsomal-membrane, *see* Liver microsomal-membrane polypeptides
Porphyrins
drug-induced conversion of liver haem 285–288
Probes
nucleases 467–477
photosensitive hydrophobic, *see* Photosensitive hydrophobic probe
Proglucagon
glicentin 337–343
Protein activator
distinct from calmodulin 507–513
human erythrocyte membranes 507–513
Mg^{2+}-dependent, Ca^{2+}-stimulated ATPase 507–513
Protein binding sites
amino acid substitution 163–172
Protein inhibitors
wheat, *see* Wheat (*Triticum*) protein inhibitors
Protein kinase
cyclic AMP-dependent, *see* Adenosine 3′:5′-cyclic monophosphate-dependent protein kinase
Protein modification
α-bromo-4-amino-3-nitroacetophenone 345–352
Proteinases
covalent binding to α_2-macroglobulin 695–701
Proteins
bili-, *see* Algal biliproteins
blue-copper, *see* Blue-copper proteins
Ca^{2+}-binding, *see* Ca^{2+}-binding proteins
γ-carboxyglutamic acid/glutamic acid ratio at specific sites 239–243
crystal-forming, *see* Crystal-forming proteins
β-galactoside-binding, *see* β-Galactoside-binding proteins
human-somatotropin-binding, *see* Human-somatotropin-binding protein 479–492
keratin, *see* Keratin proteins
kidney microvillar membrane 31–44
link, *see* Link protein
metallo-, *see* Metalloproteins
myeloma, M-603, *see* Myeloma protein M-603
phosphorylation and dephosphorylation 371–379
riboflavin-binding, *see* Riboflavin-binding protein
silk, *see* Silk protein
tetrameric, *see* Tetrameric proteins
troponin C-like, *see* Troponin C-like protein
troponin I-like, *see* Troponin I-like protein
Proteoglycans
bovine cornea, *see* Bovine cornea proteoglycans
cartilage, *see* Cartilage proteoglycans
interaction with collagen 887–891
localization in tendon 887–891
see also Glycoproteins
Prothrombin, bovine, *see* Bovine prothrombin
Protohaem ferro-lyase
inhibition by modified porphyrin 285–288
Proton magnetic resonance, *see* ^{1}H nuclear magnetic resonance
Pseudomonas C12B
inducible S3 secondary alkylsulphohydrolase 181–196
Putrescine oxidase
foetal bovine serum 197–204
Pyruvate dehydrogenase multienzyme complex
amino acid sequence around lipoic acid residues 905–908
Escherichia coli 393–401, 905–908
role of lipoic acid residues 393–401

Quaternary structure
tetrameric proteins 297–302
Quinone prosthetic group
methanol dehydrogenase 221–226

Radioactive assay
specific for spermidine oxidase 197–204

Radioimmunoassay
cartilage proteoglycans 687–694
specific quantification of mouse and human keratin proteins 281–284
Receptors
somatotropin, *see* Somatotropin receptor
Rhipocephalus phoenix, *see* Marine subtropical green algae
Rhodopseudomonas capsulata
nitrogenase A and R 273–276
Rhus vernicifera, *see* Japanese lacquer tree
Riboflavin-binding protein
pregnant-rat serum 537–540
Ribonucleic acid
heterogeneous nuclear, *see* Heterogeneous nuclear ribonucleic acid
messenger, *see* Messenger ribonucleic acid
ribosomal, *see* Ribosomal ribonucleic acid
Ribonucleic acid (25–28S) genes
common sequences in South African clawed toad (*Xenopus laevis*) and *Neurospora crassa* 75–90
Ribosomal ribonucleic acid
cloning of conserved sequences in bacteriophage λ 75–90
evolution 75–90
Ring halogenation
4-chloroaniline 893–903
Runner bean (*Phaseolus coccineus*)
cell-wall glycoproteins 53–63

Saccharomyces cerevisiae, *see* Baker's yeast
Salivary gland
submandibular, *see* Submandibular salivary gland
Sarcoplasmic reticulum
skeletal, *see* Skeletal sarcoplasmic reticulum
Scallop, bay *see* Bay scallop
Secondary alcohols
stereospecificity of alcohol dehydrogenase 703–709
Sequencing
solid-phase micro-, *see* Solid-phase microsequencing
Sericin
silk protein 413–417
Serine esterase
complement-system factor D 863–874
Serine hydroxymethyltransferase
inhibition by Cibacron Blue 3G-A 249–252
monkey liver 249–252, 623–636
purification and physicochemical, kinetic and immunological properties 623–636
Serum
competitor of oestrogen–rat α_1-foetoprotein interactions 851–856
foetal bovine, *see* Foetal bovine serum
riboflavin-binding protein 537–540
Sialoglycoprotein
membrane, *see* Membrane sialoglycoprotein
Silk proteins
isolation of smallest component 413–417
Silkworm (*Bombyx mori*)
silk protein 413–417
Singlet oxygen
cytochrome *c* chemiluminescence 131–140
Skeletal muscle
cyclic AMP-dependent protein kinase 371–379
Skeletal sarcoplasmic reticulum
Ca^{2+}-transporting ATPase 545–563, 565–575, 577–589, 591–616
Skin
histamine methyltransferase 819–828
Slime mould (*Physarum polycephalum*)
nuclear-DNA sequence organization 105–113
Solid-phase microsequencing
peptide fragmentation 515–519
Solvent isotope effects
carboxypeptidase Y 843–849
Somatotropin, human, *see* Human somatotropin
Somatotropin receptor
pregnant-rabbit liver 479–492
South African clawed toad (*Xenopus laevis*)
conserved rRNA sequences cloned in bacteriophage λ 75–90
25–28S-RNA genes 75–90
Spermidine oxidase
foetal bovine serum 197–204
Spermidine synthase
inhibition 419–428
Spermine oxidase
specific radioactive assay 197–204
Spermine synthase
inhibition 419–428
Sphingomyelin
hydrolysis in erythrocyte 'ghosts' and liposomes 115–121
Sphingomyelinase
chicken erythrocyte 'ghosts' 115–121
Spinach (*Spinacia oleracea*)
chloroplast acetyl-coenzyme A carboxylase 667–676
Spinacia oleracea, *see* Spinach
Stereospecificity
alcohol dehydrogenase 703–709
Stopped-flow studies
Cu^{2+} oxidation of adult-human haemoglobin 803–807
Struthio camelus, *see* Ostrich
Subcomponent C1q, *see* Complement subcomponent C1q
Submandibular salivary gland
chromatin digestion by micrococcal nuclease 353–360
Submaxillary gland
palmitoyl-CoA hydrolase 269–272
Subnuclear fractionation
micrococcal-nuclease treatment 467–477
Substrate analogues
binding to uricase 727–732
Substrate protection
kinetics 797–802
Sulphatase
Pseudomonas C12B 181–196
Superoxide dismutase
Neurospora crassa 321–325
Surfactant-degrading bacteria
Pseudomonas C12B 181–196

Tamm–Horsfall glycoprotein
glycopeptide 525–528

Tendon
localization of proteoglycans 887–891
Tenebrio molitor L. larva, *see* Yellow mealworm
Tetrahydrofolate
serine hydroxymethyltransferase 623–636
Tetrahydrofolate-binding domain
serine hydroxymethyltransferase 249–252
Tetrameric proteins
quaternary structure 297–302
right- and left-handed symmetry 297–302
NNN'N'-Tetramethyl-*p*-phenylenediamine
cytochrome *c* reduction 809–818
Tetrapyrroles
algal-biliprotein chromophores 303–309, 311–320
Thermodynamics
binding of substrate analogues to uricase 727–732
Thermolysin
zinc-thionein 329–335
Thy-1 antigen
membranes 1–20
thymus–brain antigen 403–412
Thymus–brain antigen
analogy to Thy-1 antigen 403–412
human brain 403–412
Toad, South African clawed, *see* South African clawed toad (*Xenopus laevis*)
Transcriptional activities
subnuclear fractionation of nuclei 467–477
Transport
membrane, *see* Membranes, transport
Trees, minimal phylogenetic, *see* Minimal phylogenetic trees
Triticum, see Wheat
Troponin C-like protein
bay scallop 447–456
Troponin I-like protein
bay scallop 447–456
Tryptensin
chemical identity with angiotensin 647–653
Type 2 copper(II)
Japanese-lacquer-tree laccase 361–366, 367–370

Uricase
binding of substrate analogues 727–732
metal content 727–732
non-classical inhibition by cyanide 733–738
physical properties 727–732
subunit composition 727–732
thermal stability 727–732
Uterus
heterogeneous nuclear RNA fractions 265–267

Wheat (*Triticum*) protein inhibitors
interaction with yellow-mealworm α-amylase 637–645

Xanthine oxidation
deviations from Michaelis–Menten kinetics 739–765
Xenopus laevis, *see* South African clawed toad

Yeast, baker's (*Saccharomyces cerevisiae*), *see* Baker's yeast
Yellow mealworm (*Tenebrio molitor* L. larva)
α-amylase 637–645

Zinc(II)-β-lactamase II
comparison with cobalt(II)-β-lactamase II 789–795
Zinc-requiring apoenzymes
re-activation by zinc-thionein 329–335
Zinc-thionein
re-activation of zinc-requiring apoenzymes 329–335